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Update: LLRice Testing Requirements for Imports of U.S. Rice

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Report Highlights:

This report contains updated information regarding Korea's multiple testing requirements to confirm the absence of LLRice in imports of U.S. rice. The U.S. rice exported more than 63,000 metric tons (milled) under the 2006 MMA, and all shipments tested negative for the presence of LLRice. These testing requirements remain in effect for 2007 MMA shipments.

Includes PSD Changes: No
Includes Trade Matrix: No
Annual Report
Seoul [KS1]
[KS]

After the discovery of trace amounts of LLRice 601 in the U.S. rice supply in August 2006, the Korean government instituted multiple testing requirements to verify the absence of all LLRice events in shipments of U.S. rice. All varieties of LLRice are unapproved for human consumption in Korea and are therefore prohibited Korean Food Sanitation Act. In particular, Korea's Ministry of Agriculture & Forestry (MAF) requires two separate tests prior to loading, while the Korean Food & Drug Administration (KFDA) requires a third test upon arrival.

The perceived uncertainty surrounding these testing requirements limited the participation of U.S. companies in the 2006 MMA. In fact, only one U.S. rice exporter participated. Meanwhile, other U.S. rice companies that had shipped rice to Korea in year's past, reportedly decided not to participate due to the possibility, albeit extremely unlikely, of a rejected shipment.

The U.S. rice exported 63,101 metric tons (milled) under the 2006 MMA, and all shipments tested negative for the presence of LLRice. These testing requirements remain in effect for 2007 MMA shipments.

MAF Testing Requirements:

The Korea Agro-Fisheries Trade Corp. (aT) purchases all imported rice. This quasi-governmental organization, which is under the direction of MAF, purchases and sells U.S. rice to local wholesalers and processors. Given the Korean government's role in these purchases, MAF requires two tests prior to loading.

The first test is conducted by a laboratory participating in the USDA/GIPSA's Liberty Link Rice Proficiency Program will conduct the first test. More information on this program can be found at www.gipsa.usda.gov. MAF has selected the Overseas Merchandise Inspection Company (OMIC) to conduct the second test. Both laboratories conduct their respective tests using the Bayer CropScience (BCS) 35S-Bar PCR method with a recommended sample size of 3,000 grains.

KFDA Testing Requirements:

KFDA requires all incoming shipments of U.S. rice to be tested a third time upon arrival. In accordance with the Food Code, KFDA field inspectors draw a 1 kg sample per import application, which is submitted to KFDA for import inspection. The amount reported on the import application is usually consistent with volume specified on the bill of lading. Therefore, in the case of a containerized shipment, each container would be tested. In contrast, a break-bulk shipment of processing rice totaling 15,000 MT (brown basis) would only be tested once.

From the larger 1 kg sample, a 6,000 grain (~200 g) sub-sample is collected, ground and tested using a 35S promoter screening PCR test. This sample size of 6,000 grains is double the BCS recommended sample size. KFDA only uses the 35S-Bar test if the screening test indicates the presence of biotech materials. However, since KFDA first started testing U.S. rice in October 2006, it has not needed to use the 35S-Bar test.

In the event of a suspect positive, field offices have been strongly urged to send a sample to KFDA headquarters (HQ) for confirmatory testing before making a decision to reject the shipment. Samples testing positive must be kept for 60 days. The sample sent to KFDA HQ for confirmatory testing would be drawn from the larger 1kg sample. Currently, however, there is no legal basis requiring KFDA field offices to follow this suggested practice.

Chinese rice is also subject to the same GM arrival testing requirements (i.e. all shipments are tested upon arrival) using qualitative PCR methods.

National Agricultural Products Quality Management Service (NAQS) of MAF is conducting monitoring testing after the shipment passes KFDA inspection. NAQS collects the recommended sample size and tests using the BCS 35S-Bar PCR test method.